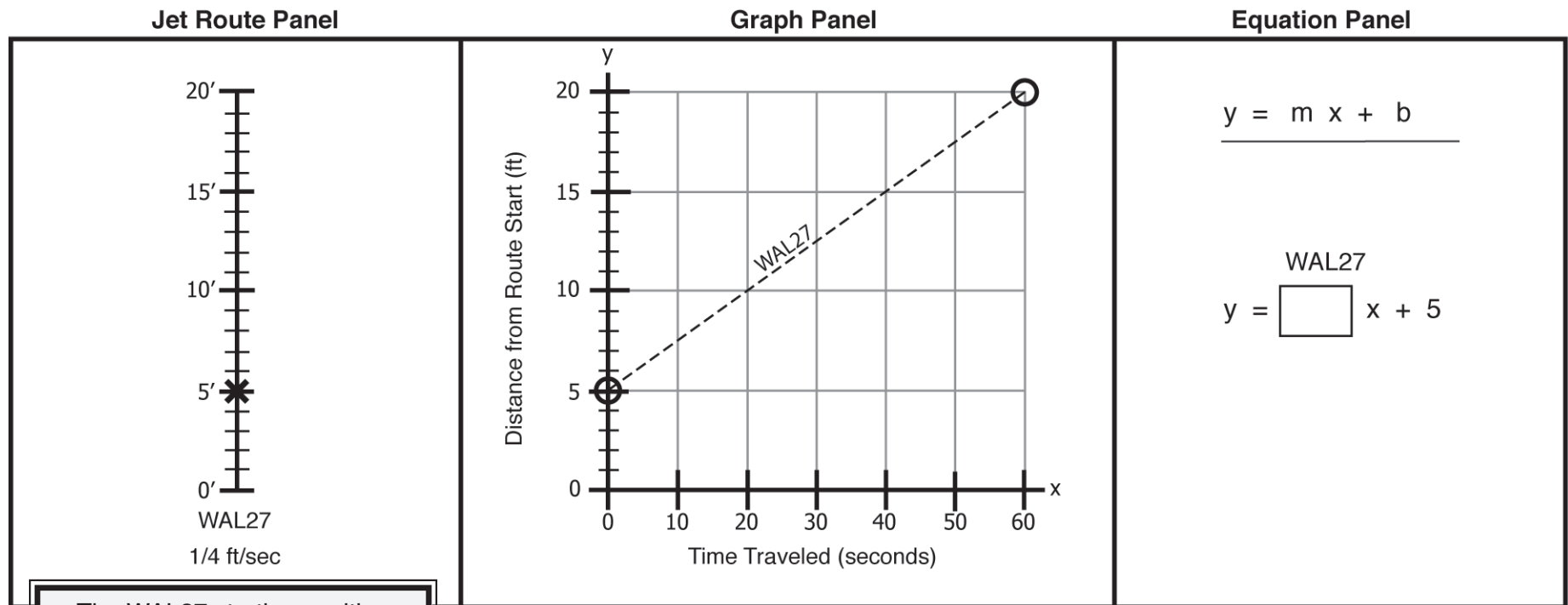Name _____

Student Assessment C

Analyzing the Speed of One Plane

1. Use the information given in the Jet Route Panel or in the Graph Panel to do the problem below. You do **not** need to use the simulator.
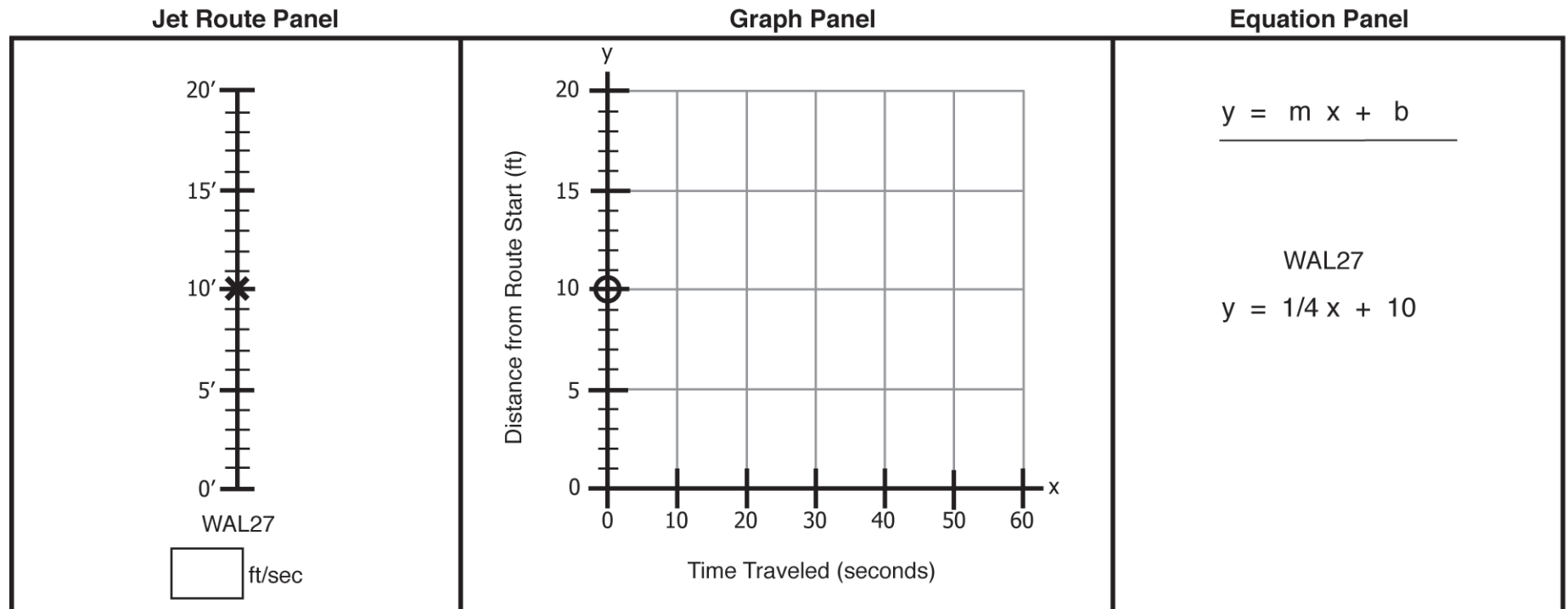
Jet Route Panel	**Graph Panel**	**Equation Panel**

Jet Route Panel:

WAL27

1/4 ft/sec

The WAL27 starting position is shown.

Graph Panel:

WAL27

Distance from Route Start (ft)

Time Traveled (seconds)

Equation Panel:

$y = m x + b$

WAL27

$y = \boxed{} \, x + 5$

(a) Fill in the missing value in the WAL27 equation.

2. Use the information given in the Equation Panel to do the problem below. You do **not** need to use the simulator.

Jet Route Panel	Graph Panel	Equation Panel

Jet Route Panel

20′
15′
10′ ✳
5′
0′
WAL27

☐ ft/sec

Graph Panel

y
Distance from Route Start (ft)
20
15
10 ⊕
5
0

0 10 20 30 40 50 60   x

Time Traveled (seconds)

Equation Panel

$y = m x + b$

WAL27

$y = 1/4\ x + 10$

Jet Route Panel: The WAL27 starting position is shown.

(a) Fill in the WAL27 speed.

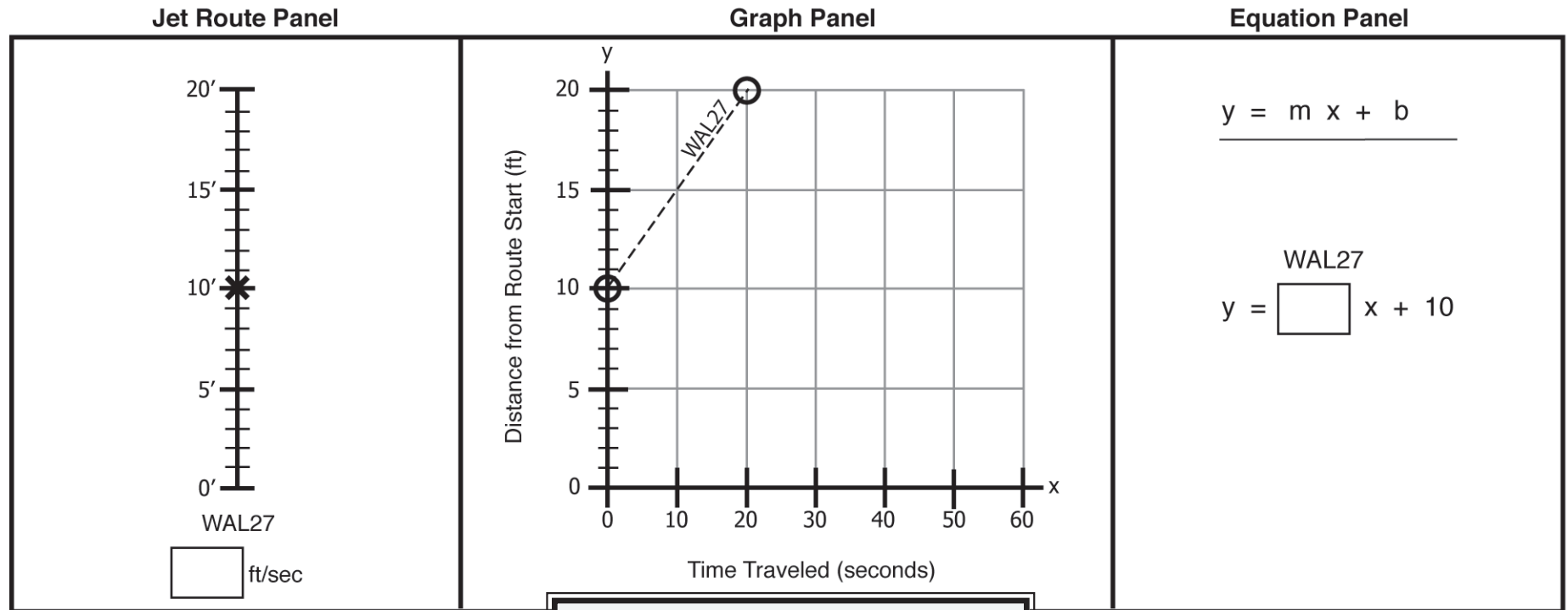**Graph Panel**: One point for the WAL27 line is shown.

(b) Plot one more point (●) for the WAL27 line.

Hint: You can use the WAL27 equation to make a table of points that lie on the line.

(c) Connect the two points to draw the WAL27 line.

3. Use the information given in the Graph Panel to do the problem below. You do **not** need to use the simulator.

Jet Route Panel

20′
15′
10′ ✳
5′
0′
WAL27

[ ] ft/sec

Graph Panel

Distance from Route Start (ft)

y

20
15
10
5
0

WAL27

0   10   20   30   40   50   60   x

Time Traveled (seconds)

Equation Panel

$$y = m x + b$$

WAL27

$$y = \boxed{} \; x + 10$$

Hint: Find the slope of the WAL27 line.

Jet Route Panel: The WAL27 starting position is shown.

(a) Fill in the WAL27 speed.

Equation Panel:

(b) Fill in the missing value in the WAL27 equation.